

Abstract

Executive Summary. Purpose and structure of the report: The Offshore Wind sector is a major, dynamic, and rapidly evolving renewable energy industry. This is particularly so in Europe, and especially in the UK. Offshore Wind Farms (OWFs) are usually large projects in terms of spatial spread and development expenditure. Such projects normally require specific planning and assessment procedures, including an Environmental Impact Assessment (EIA), in advance of any development consent. For OWFs, the focus of EIA activity, and the content of resulting Environmental Statements (ESs), has been on the biophysical impacts. There has been much less ES content on the impacts on the human environment, and especially the impacts on local and regional coastal communities adjacent to the offshore projects. Such communities are often suffering greatly from the decline in traditional industries, such as shipbuilding, fishing and tourism. Human environmental impacts include a wide range of social and economic issues. However, the lack of knowledge on the impacts of OWFs on human interests can greatly hamper case management. There is a need for adequate planning and assessment tools for the key stakeholders – developers, consultancies, governments (local, regional and national), development agencies and the general public—who are the audience for this report. The focus of this document, as structured below, is to provide an array of good practice guidance for stakeholders on the under-assessed socio-economic implications and opportunities emanating from the growth in this dynamic renewable OWF energy industry. In each of sections 2-5, there are short summaries of key guidance points, highlighted in yellow, underpinned by research findings and good practice examples, drawing on the findings in the six Technical Reports for this research programme.

Context: a dynamic OWF renewable energy industry: The UK is the global leader in offshore wind energy generation. At the end of 2018, the UK had 7.9GW in 38 operational OWFs, with almost 2,000 wind turbines, making the country the nation with the single largest operating capacity in the world (Crown Estate 2019). The most recent forecast is for this capacity to grow to 40GW by 2030, with up to £50bn infrastructure spend (Queen's Speech Dec 2019). Such growth provides important potential socio-economic opportunities for the UK, and for regions and local areas adjacent to the OWF sites, in terms of employment, supply chain and other socio-economic benefits. Yet there is a concern that as an industry, the UK offshore wind energy sector should take the delivering of UK content and UK economic success, at all levels, more seriously. An overview of the procedures for planning and assessing the socio-economic impacts of major OWF projects: Socio-economic impacts are of growing importance in the planning and assessment of OWFs, especially in the UK. International drivers include IFC/World Bank Performance Standards (IFC 2012, World Bank 2017), IAIA Social Impact Assessment Guidelines (2015) and the amended EIA Directive (EC 2014). Major projects have special assessment procedures. For example, in England, OWFs greater than 50MW come under the 2008 Planning Act which identifies a subset of Nationally Significant Infrastructure Projects (NSIPs), with impacts examined by the Planning Inspectorate, National Infrastructure Division (PINs/NID). There is a growing recognition by practice of the importance of a social licence to operate from the community, and of local content. However, to date, from a review of UK OWF ESs, there has been a predominance of assessment of economic impacts, with much more limited consideration of the assessment of social impacts. There is also a concern that many of the economic benefits of major projects may leak out way beyond the local area. A consideration of socio-economic impacts needs to clarify the type, duration, spatial extent and distribution of impacts. In other words, the analyst need to ask what to include, over what period, over what area, and for whom. A socio-economic impact assessment examines these questions through the various steps in the assessment process – baseline studies, scoping; prediction and assessing impact significance; mitigation and enhancement of impacts; and monitoring. There is consideration of the steps separately for economic impacts and for social impacts in the main sections of this guidance report. Impact assessment process -- some economic impact findings and recommendations: Economic impacts will normally include employment, Gross Value Added (GVA) and specific sector impacts, for each project stage, time-period and spatial level. There are Direct impacts (eg project employment), Indirect impacts (eg supply chain), and Induced impacts (eg retail expenditure of employees). For the project, it is important to establish, as fully and accurately as possible, the investment/expenditure and the associated human resources plans for the key stages of the project lifecycle—especially for the construction (CAPEX) and O&M stages (OPEX). The prediction and assessment of economic impacts of an OWF project on various spatial areas is an inexact, but important, exercise. Methods used, such as scenarios, should seek to reduce uncertainty associated especially with port location, supply chain and technology. Use may be made of a range of potential local and regional employment impact rules of thumb for total construction and for each O&M year, using a jobs per project MW size, and GVA £m per project MW size approach. These can provide broad orders of scale and ranges of potential economic impacts for the analyst. For socio-economic impacts, and particularly for economic impacts, the focus in assessment is often more on enhancing beneficial impacts, rather than on mitigating adverse impacts. Key enhancement measures include supply chain websites, supply chain events, skills training programmes, and local recruitment targets.

Use can be made of an Employment and Skills Plan, or equivalent, in a planning permission to support effective implementation of socio-economic undertakings (predominantly economic). Monitoring is invaluable in learning from practice. It allows the comparison of predictions with actual outcomes, provides guidance on actual impacts for future OWF planning, and facilitates an adaptive approach to project implementation. Monitoring of recent projects shows the economic value of onshore construction and especially the O&M stage for local areas, and the need to increase local and regional economic benefits from offshore construction. Impact assessment process--some social impact findings and recommendations: Social impacts of OWFs include impacts on the demography, housing, other local services, and socio-cultural/quality of life of the host coastal area. Some social issues - such as attitudes to change in seascape, way of life and implications for marine environment-- are important but qualitative and more difficult to assess. Key tasks in assessing social impacts follow the main steps for EIA, particularly highlighting the importance of participatory approaches to engage communities. Social impacts should be covered whatever the distance from the coast of the OWF, for there is always onshore construction, the substantial offshore construction workforce may have onshore impacts (eg temporary housing), and there is the important O&M stage. Affected communities should be involved and engaged at the earliest stage possible, to achieve a 'social licence to operate'. This will hopefully minimise negative social impacts and maximise local community benefits. Prediction methodology for social impacts is largely descriptive and qualitative. While various methods can be employed (eg. scenarios), predicting impacts for social issues is not a precise science, and an element of assessor judgement, informed by stakeholder consultation, is necessary. Mitigation and enhancement measures are likely to focus on local area education and skills training initiatives. Monitoring of social impacts, including views on wellbeing/QoL, local services, community cohesion and lands